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Perceived Body Image, Anti-fat Attitudes and Healthy Lifestyle Practices among Nursing Students towards Obesity Prevention

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Abstract

Obesity rates will continue to grow worldwide for the foreseeable future. Obesity is preventable. To improve the notion of health, everyone in society must practice a healthy lifestyle to prevent obesity and overweight. Recently, Malaysians who practice healthy lifestyles have decreased and the rate of overweight or obesity is increasing. Nurses and nursing students have a significant role and should become role models with good body image in educating and promoting healthy lifestyles to the public. However, a lot of studies show that nurses and nursing students fail to engage in healthy lifestyles. Therefore, the main objective of this study is to determine perceived body image, anti-fat attitudes and healthy lifestyle practices among nursing students at private healthcare university colleges in Malaysia. Methods: Data was collected using valid and reliable questionnaires to determine Perceived Body image, Anti-fat Attitude and Healthy Lifestyle behaviour. Dependent variables were correlated with independent variables. The results of this study showed that nursing students are satisfied with their body image (61.2%), most nursing students engage in unhealthy lifestyles (48.6%) and the majority of nursing students have strong anti-fat attitudes (58.6%). There is no significant relationship between perceived body image, anti-fat

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attitude and healthy lifestyles. Conclusions: This result could conclude that it confirms that there is no direct link between Perceived body image, anti-fat attitudes, and Healthy lifestyle behaviours, as suggested in the Theory of Planned Behaviour (TPB). There are intermediary factors such as health motivation and perceived control as determining factors to contribute to behaviour prediction. This evidence can help nursing educators improve motivation factors in the nursing curriculum to encourage nursing students to practice healthy lifestyles.

Keywords: Nursing Students, Obesity, Body Image, Attitude, Healthy Lifestyle.

Introduction

Obesity rates will continue to grow worldwide for the foreseeable future. As the obese are disproportionately affected by many health conditions, there will also be an increasing number of obese patients across all healthcare settings in the future. Obesity becomes more prevalent as a person moves from adolescence to young adulthood. Therefore, obesity prevention must be enhanced from a young age specifically during college or university studying period. Obesity become the main factor cause of coronary heart disease, hypertension, and diabetes, all these non-communicable diseases linked to having a high body mass index (BMI). For optimal health, the World Health Organization (WHO) recommends that people maintain a BMI between 18.5 and 24.9 kg/m². The increasing prevalence of overweight and obesity represents a global epidemic, yet a preventable nutritional problem worldwide (Garry, et al., 2017). As a middle-income country, Malaysia is now experiencing rapid urbanization and industrialization, which have brought significant changes to Malaysian lifestyle and dietary patterns. Over the past few decades, these tremendous developments have now caused a "double burden of malnutrition" crisis among Malaysians, especially concerning obesity, which challenges Malaysia's health sector because obesity is causing many health problems. Obesity is defined as a state where excess fat has accumulated in the body and has jeopardized health. Malaysia appears to be the fattest country in ASEAN, with medical costs associated with obesity accounting for 10-20 per cent of the country's healthcare spending. According to the most recent data from the Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia (2020), the prevalence of overweight and obesity has reached such alarming proportions that it now affects half of Malaysia's adult population (50.1%).

Obesity among healthcare workers (HCWs) is also a significant issue, as it affects HCWs' morbidity. Obesity among healthcare workers (HCWs) is a serious problem that can damage their health as well as their capacity to do their jobs. Nurses have the highest rates of obesity among healthcare workers. According to a study conducted by Coomarasamy et al. (2014) on 1006 nurses in Malaysia. The majority (33.55%) of the respondents were pre-obesity and 17% were obese. Some (0.6%) were classified as Class III obese. Nurses are highly expected to be role models for healthy behaviours in national and international policy by professional bodies, with the argument that there is a link between nurses' personal health and patient adoption of healthier behaviours. This could be due to patients being inspired by and modelling the nurse's obvious healthy lifestyle, or it could be due to nurses being more inclined to promote their patients' health by providing public health or health promotion advice and directing them to support resources. Nurses and nursing students have a significant role in health promotion and should assist people in practising healthy lifestyles. Negative body image and behaviours put nurses and nursing students in a precarious position when advising overweight and obese people to adopt healthy lifestyles.

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

Body image is one's perception of personal physical appearance, leading to body satisfaction or body dissatisfaction. It is essential to consider the impact of health education on positive attitudes, good body image and practising a healthy lifestyle towards obesity prevention. The results of this study provide evidence for improving healthy lifestyle habits in nursing students to prevent obesity in a younger generation of healthcare professionals as future nurses.

Literature Review

Literature reviews have been done through literature searches conducted by searching for reference lists of retrieved papers in the electronic databases ProQuest, Science Direct, Sage, and PubMed. The following keywords and phrases were searched utilizing the Boolean operators 'AND' and 'OR' to maximize search effectiveness and efficiency. A total of 226 research articles were discovered to be relevant to the topic, with 42 being particularly useful. Articles were omitted if they were not written in English or were older than ten years. Obesity prevention, nurses and nursing students, healthy lifestyles, body image, attitude and obesity risk information among nursing students were all topics covered in the articles chosen. Finally, only papers that were related to the study's objectives were included in the discussion.

Several studies have determined that component lifestyle intervention program for obesity prevention has a positive impact on nursing students' body image, attitude, and healthy lifestyle practices. To properly promote a goal habit, participants should first develop a desirable attitude by determining their self-confidence in their perceived body image. The college or nursing educators should have a better plan in the curriculum to help nursing students become better nurses in the future. Obesity prevention education allows people to recognize both the effects of current conduct and the rewards of desirable behaviour. To improve individual health status, it is very important to design and plan a program based on the patterns and theories of health education and health promotion (Jeihooni et al., 2022). A few studies indicate strong anti-fat attitude scores, increased self-awareness and realized that their weight put them at risk for obesity. This attitude is necessary for students' transition to a healthy lifestyle. Therefore, the theory of planned action provided the theoretical basis for this study. According to this hypothesis, a person's desire to perform a behaviour is the best predictor of actual behaviour. A strong anti-fat attitude can remind them not to be obese. The three distinct constructions of information that can impact their attitude, subjective norms, and perceived behavioural control determine such intention. Subjective norms reflect an individual's impression through body image of how others expect them to execute the behaviour and perceived behavioural control is an individual's perception of how much control they have over and how they perform the behaviour (Ajzen, 2011).

According to the Theory of Planned Behaviors, people are more inclined to engage in certain behaviours if they believe there are a lot of benefits and few drawbacks (Mazloomy et al., 2017). Nurses and nursing students can use the Theory of Planned Behaviour as a framework to consider their lifestyle, body image and attitudes, as well as their intentions to promote a healthy lifestyle to others or the public, and may be able to influence the factors that are thought to predict behaviour change in the patients they care for (McKenzie and Brown, 2014). Obesity is a public health hazard that is becoming more prevalent. Adult and teenage obesity is on the rise. Obesity becomes more common as a person moves from adolescence through adolescence to adulthood. Importantly, obesity prevention should be strengthened from an early age. Malaysia is a dynamically developing country with a diverse population. To meet the challenges of modern life, residents must become more aware of the

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

need to adopt a healthy lifestyle. Malaysia's economy, once largely based on agriculture, is now increasingly dependent on industry. The prevalence of overweight (BMI 23–27.5 kg/m2) among residents of Penang, Malaysia was 37.3%, the highest among 15 states in Malaysia. The most obese ethnic group was Indian (43.5%), followed by Malay (35.4%) and Chinese (33.4%). A 21.9% of the total population sample made up of females' employment status and a monthly salary of RM9,000–9,999 are other sociodemographic factors associated with severe obesity (Ministry of Health Malaysia, 2015). Given this trend, Malaysians need to take measures to prevent obesity.

Healthcare workers are responsible for promoting healthy lifestyles to prevent obesity in society. To create the right image of a healthy lifestyle and ideal weight for the public, healthcare workers must always have a good body image. Unfortunately, various studies report a high prevalence of overweight and obesity among healthcare workers. Along with doctors, nurses play an important role in promoting a healthy lifestyle. Nurses make up the largest group of healthcare workers (World Health Organization 2017). As the largest professional group in the international health system, nurses are at the forefront of promoting health to address these health challenges, especially obesity prevention. Obesity among healthcare professionals, especially nurses, is a major problem not only in Malaysia but also worldwide. In a study of 422 nurses in England, Kyle et al (2017) found that 25% of nurses were obese and 61% were overweight. Nurses have the highest obesity rates compared to other medical professions. According to Darch et al (2017) stated that nurses need to be prepared and confident to intervene with patients when obesity becomes a health problem. The stigma around obesity is widespread and obese people face discrimination from healthcare providers, employers, and schools (World Health Organization, 2017). Nurses, as health care workers closest to the public, should be good role models for healthy lifestyles. Nursing students' training time should be used to instil healthy lifestyle habits. Nursing students trained to become professional nurses must learn both theory and practical skills to provide excellent care to all patients. Nursing students can also serve as role models to patients and the public by advising them on how to avoid obesity.

Therefore, the main objective of this study is to determine nursing students' perceived body image, anti-fat attitude and their self-reported healthy lifestyle practise towards obesity prevention. There are four focused research questions inherent in this objective:

- 1. What is the level of healthy lifestyle practice among nursing students?
- 2. What is the level of nursing student's perceived body image?
- 3. What is the level of anti-fat attitude among nursing students?
- 4. Is there any relationship between perceived body image and anti-fat attitude towards healthy lifestyle behaviour among nursing students?

Methodology

This is a quantitative cross-sectional study that used an online questionnaire to collect data on nursing students from a private healthcare university college in Malaysia. After evaluating similar validated questionnaires from previously published studies, the survey questionnaires were adapted to assess perceived body image, anti-fat attitude and healthy lifestyle behaviour among nursing students. Perceived body image and anti-fat attitude were determined in the previous study as important factors to help nursing students establish good role model behaviour toward overweight and obese people, they must first learn about the physical and mental health consequences of being overweight or obese. An online

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

questionnaire was used as a data collection platform because data collection was done during the pandemic COVID-19. Due to Movement Control Order (MCO) in Malaysia, potential participants were contacted at random through email and WhatsApp Groups and assigned to fill out a questionnaire via an online Google form. Before consenting to participate in the study, the participants were informed about the study's goals and objectives.

Instrument

The questionnaire used in this study has been adapted with permission. The questionnaire was divided into four sections. Section A is demographic information, including participant age, gender, race, self-reported height and weight, and body mass index. Section B contains questions about body image recognition. The instrument used in this study was the Body Self-Assessment Questionnaire (BSIQSF). BSIQ-SF consisted of nine factors, namely 'Overall Appearance Evaluation, Health Fitness Influence', 'Investment in Ideals', 'Health Fitness Evaluation', 'Attention to Grooming', 'Height Dissatisfaction', 'Fatness Evaluation, Negative Affect', and 'Social Dependence'. Participants were recorded in the form of a 5point Likert scale ranging from 'Not at all True of Myself', 'Slightly True of Myself', 'About Halfway True of Myself', 'Mostly True of Myself', and 'Completely True of Myself'. The score was determined by the sum of the values of the scale's items. Section C is about The Anti-fat Attitudes Questionnaire (AFA), which was adapted from Crandall (1994). The AFA is a scale that indicates explicit prejudices against obesity and is made up of 10 items with Likert-type answer options from 1 (strongly disagree) to 5 (strongly agree). The total AFA score is the sum of scores on the scale. The Likert scale measures stereotypes about obese people. For each question, participants are asked to indicate their degree of agreement or agreement with a particular statement, such as "Fat people make me a little uncomfortable" Scores range from 10 to 50, with higher scores indicating a stronger anti-fat attitude. The final section is designed to define healthy lifestyle behaviour. There are 23 items adapted from Walker et al (1995) on healthy activities and nutrition. The summated behaviour rating scale uses a 5-point response format to assess the frequency of self-reported healthy lifestyle behaviours, which is defined as a multi-dimensional pattern of self-initiated practices such as "Exercise vigorously for 20 or more minutes at least three times a week" and "Limit sweets and sugar-containing foods". The scale runs from 1 (never) to 5 (routinely). The scale of the participant's responses to the questions is used to calculate an overall score, the higher the score, the healthier the claimed lifestyle. These items are related to the study's goal and are an appropriate strategy because no other specific measures exist to assess healthy lifestyle behaviour. Malaysia has numerous ethnic groups such as Malay, Indian, Chinese, and others. Data on demographic factors such as age, gender, and race were also collected to enable the examination of differences within the student population. A healthy lifestyle of any kind is often influenced by a family's ethnicity and race. To verify the validity of the survey results, a pilot study was conducted with 53 randomly selected nursing students, and these nursing students were excluded from this study. The revised version after the pilot study questionnaire was referred to expert content for final approval and feedback for the actual study. Cronbach's alpha for this questionnaire was 0.92. This value determines that the tool is valid and reliable for this study. Participants voluntarily informed consent was attached to this questionnaire.

Study Population

Nursing students from private healthcare institutions make up the study population. Participants were drawn from private healthcare university colleges in Malaysia, with

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

students from diverse socioeconomic backgrounds. The study subjects were full-time nursing college students (N=900). The exclusion criteria are part-time nursing students. The number of participants required for the study was determined using the Krejci-Morgan table. In a population of 900 students, the minimum sample size to obtain results representative of the target population was 286 students. Random sampling was used, and surveys were distributed online via email and WhatsApp groups. 900 surveys were distributed and a total of 348 were returned (response rate = 38.6%). This meets the sample size calculator's requirements for obtaining data representative of the target population.

Analytical Statistics

The data was first uploaded to Microsoft Excel for coding and then transferred to SPSS version 26 for statistical analysis from online Google form speared sheets. Demographic factors, perceived body image, anti-fat attitude and healthy lifestyle behaviour among nursing students were all described using descriptive statistics. Analyses were performed for both inferential and descriptive. Inferential statistics examine if the findings from the population can be generalised, while frequency statistics reveal the distribution of the scores. The Kolmogorov-Smirnov statistics revealed a significant value of 0.000, indicating that the assumption of normality had been violated (Pallant, 2020) showed the data was not normally distributed. To find out the relationship between healthy lifestyle behaviour and the perceived body image of nursing students, the relationship between anti-fat attitude and healthy lifestyle behaviour Spearman's Rho correlation coefficient was used to investigate the relationship between independent and dependent variables.

Funding Source

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Ethical Considerations

The University College Research Management Committee (RMC) received ethical approval, and the Head of the School of Nursing granted administrative authority to conduct the study. Participants were contacted via email and given a Participation Information Sheet with an explanation of the study informed consent and a clear statement that if they completed the online questionnaire, they were assumed to have granted consent. Because no personally identifiable information was used, the nursing students' anonymity was guaranteed.

Data Collection

Respondents' data was collected via an online survey hosted on the Google Forms platform, and surveys took about 20–30 minutes to complete. After one week, the students received a reminder e-mail, followed by a final reminder e-mail one week later. Within one month all data managed to gather.

Results

The first part of the survey collected detailed descriptive information of demographic data of nursing students, the second part was the last question of perceived body image, the third part was the last question of an anti-fat attitude questionnaire, and the last part was of the healthy lifestyle behaviour of nursing students.

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

Table 1
Socio-Demographic Data of Participant

Variable	Frequency (n)	Percentage (%)	
AGE			
18-21	256	73.6	
22-25	71	20.4	
26-30	21	6.0	
BMI			
Obese	23	6.6	
Overweight	78	22.4	
Normal	202	58.0	
Underweight	45	12.9	
GENDER			
Female	322	92.5	
Male	26	7.5	
RACE			
Malay	297	85.3	
Chinese	3	0.9	
Indian	31	8.9	
Others	17	4.9	

Table 1 explains demographic data. Demographic variables Characteristics of participants (n=348). A total of 348 nursing students from Private Healthcare University College have participated in this study. The findings are shown in Table 1 for participants aged between 18 years old to 30 years old. BMI was calculated by dividing weight (kg) by the square of height (m), and based on the BMI, study participants were classified into four categories; Underweight (BMI<18.5 kg/m²), Normal body weight (BMI between 18.5 and 24.9 kg/m²), Overweight (BMI between 24.9 and 29.9 kg/m²), and Obese (BMI \geq 30 kg/m²). The body mass index (BMI) of nursing students shows the majority of nursing students, 202 (58.0%) are normal weight, 45 (12.9%) are underweight, whereas 78 (22.4%) are overweight and the rest of the population, 23 (6.6%) are obese. Most of the nursing students are female, n=322 (92.5%) and only n=26 (7.5%) are male. Malaysia is a multiracial country whereby, Malay nursing students make up the majority of those involved in this study with 297 individuals (85.3%), followed by Indian 89 (31%), Chinese 3 (0.9%) and other races 17 (4.9%).

Table 2
Perceived Body Image Among Nursing Students

Level	Frequency (n)	Percentage (%)	
Body satisfaction	213	61.2	
Body dissatisfaction	135	38.8	

The instrument used to determine perceived body image either respondents are satisfied or dissatisfied about their body image by using the Body Self-Image Questionnaire-(BSIQSF). BSIQ-SF comprises 10 subscales, with responses captured on a 5-point Likert scale ranging from 1 = Not at all True of Myself, 2 = Slightly True of Myself, 3 = About Halfway True of Myself, 4 = Mostly True of Myself, and 5 = Completely True of Myself. The result shows that

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

231 (61.2%) respondents were satisfied with their body image and 135 (38.8%) dissatisfied with their body image. (Table 2)

Table 3
Anti-Fat Attitude Among Nursing Students.

Anti-fat attitude score range	Score Description	Frequency (n)	Percentage (%)
10-12	Very weak anti-fat attitude	4	1.1
13-25	Weak anti-fat attitude	136	39.1
26-38	Strong anti-fat Attitude	204	58.6
39–50	Very strong anti-fat Attitude	4	1.1

The Anti-Fat Attitude (AFA) is scored using a Likert-type response format (1 = strongly disagree to 5 = strongly agree). Higher scores indicate stronger anti-fat attitudes. The minimum score on the ATOP was 10 while the maximum obtained was 50, mean of 26.6. Recoding the AFA Scale score into quartiles (10–12 very weak anti-fat attitudes; 13–25 weak anti-fat attitudes; 26–38 strong anti-fat attitudes; 39–50 very strong anti-fat attitudes). The result (Table 3) shows most of the nursing students displayed strong anti-fat attitudes towards obese people 204 (58.6%), weak anti-fat attitudes 136 (39.1%) very weak anti-fat 4(1.1%) and very strong anti-fat attitudes 4 (1.1%). Cronbach alpha reliability testing obtained a value of 0.95, suggesting a reliable instrument indicated a reliable result of the study.

Table 4
Healthy Lifestyle Score Among Nursing Students

Healthy lifestyle score	Frequency (n)	Percentage (%)
Very poor healthy lifestyle behaviour	17	4.9
Poor healthy lifestyle behaviour	169	48.6
Good healthy lifestyle behaviour	148	42.5
Very good healthy lifestyle behaviour	14	4.0

The Healthy Lifestyle questionnaires achieved a Cronbach alpha value of 0.97. Scores on the Healthy lifestyle behaviour are determined by a summated behaviour rating scale that uses a 5-point response (1 = never, 2 = Rarely, 3 = sometimes, 4 = often, 5 = routinely). This format is used to assess the frequency of self-reported healthy lifestyle behaviours or practices among nursing students, the scores ranged from 23 to 45 as very poor healthy lifestyle behaviour, 46–68 score = poor healthy lifestyle behaviour, 69–91 = good healthy lifestyle behaviour and 92-115= very good healthy lifestyle behaviour. Based on the scores, only 4.9% of nursing students presented with very poor practice of healthy lifestyle. 48.6% poor healthy lifestyle behaviour (42.5% good) and 4% practice very good healthy lifestyle behaviour (Table 4).

Scale Correlations

The relationship between total scores of the Healthy lifestyle, Anti-fat attitudes and perceived body image was investigated using Spearman's Rho Correlation. No statistically significant correlations were found. Considering the philosophy of health promotion models, one could conclude that it confirms there is no direct link between perception of body image,

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

anti-fat attitudes and healthy lifestyle behaviours, as suggested in the Theory of Planned Behaviour (TPB).

Table 5
Correlation Between Body Image and Healthy Lifestyle Behaviour Among Nursing Students

Correlations	3		HLS	BI	
Spearman's Rho	Healthy lifestyle (HLS)	Correlation 9coefficient	1.000	044	
		Sig. (2-tailed)		.418	
		N	348	348	
	Body image (BI)	Correlation coefficient	044	1.000	
		Sig. (2-tailed)	.418		
		N	348	348	

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Table 6

Correlation Between Anti-Fat Attitudes and Healthy Lifestyle Behaviour Among Nursing
Students

Correlations	5		HLS	AFA	
Spearman's Rho	Healthy lifestyle (HLS)	Correlation coefficient	1.000	086	
		Sig. (2-tailed)		.107	
		N	348	348	
	Anti-fat attitude (AFA)	Correlation coefficient	086	1.000	
		Sig. (2-tailed)	.107	.nil	
		N	348	348	

^{*.} Correlation is significant at the 0.05 level (2-tailed).

According to the TPB, three variables (attitudes, subjective norms, and perceived behavioural control) influence a person's behavioural intention, which determines whether the desired behaviour is displayed. The findings revealed that awareness of the risk of obesity can predict respondents' behaviour based on core beliefs, such as the individual's judgement of susceptibility to sickness, severity, and cost. The HBM, like the TPB, implies that health motivation and perceived control are important aspects to consider when predicting behaviour.

Discussion

The main purpose of this study was to determine nursing students 'perceived body image, anti-fat attitude and their self-reported healthy lifestyle behaviours, particularly physical activity, and nutritional intake. This study has several flaws. The findings are based on self-reported data from a sample of nursing students at a single college, and some respondents may under- or over-report specific healthy lifestyle behaviours. However, these were completely anonymous, and respondents admitted to unhealthy behaviour. The result gives an assumption that all the study's respondents were nursing students, there's a chance

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

that bias influenced their responses as they are aware nursing students must display a positive healthy lifestyle to the public as role models, according to the (Nursing and Midwifery Council, 2018). To overcome this potential bias researcher suggested that future studies to use a qualitative component might have been included in the design to gather additional in-depth and context-rich data that could have aided in the interpretation of the survey results.

The findings of this study revealed most of the nursing students (48.6%), practice poor healthy lifestyles such as lack of exercise activity and poor intake of nutritional diet among nursing students, correlating with those of Rodriguez-Gazquez et al (2016), who employed a lifestyle assessment questionnaire on 380 nursing students in a cross-sectional study. Overweight and obesity are known risk factors that include a lack of physical exercise and a bad diet (Borle, et al., 2017). The study found that nearly a quarter of nursing students skipped breakfast and ate very few fruits and vegetables. In another study in the UK, 36% of people did not meet the UK National Health Service requirement of five meals a day (fruits and vegetables) considered the minimum diet necessary to maintain a healthy weight and heart. According to Bakhshi (2015), young people who have breakfast eat better, consume fewer unhealthy snacks, control their weight better, and have better glucose control throughout the day. According to Rodriguez-Gazquez et al (2016), 90.3% of nursing students eat unhealthy food every day. One possible explanation for this is that nursing students' schedules combined with placement and financial constraints may lead to diets high in processed foods that increase the risk of overweight or obesity.

Nurses and nursing students must understand the causes of overweight and obesity to prevent acquiring weight bias towards their patients and peers. Oversimplifying the causes of obesity contributes to weight prejudice, according to the (World Health Organization, 2017). While the focus should be on the individual's behaviour, nurses should not overlook the role of social and environmental factors in contributing to such behaviour. Weight stigma can lead to bad eating habits, worsening obesity and being overweight. Evidence suggests that knowledge and skills are built at the undergraduate level (Moustafa, et al., 2017) and that nurse education has an impact on future healthcare practice quality. Nursing students will make up most of our future nursing workforce, so nursing research and education must adapt to incorporate an emphasis on obesity prevention. It is well-established that establishing a shared educational learning area has a significant impact on learning. Additionally, it brings people together, stimulates discovery, collaboration, and conversation on a variety of issues in a non-judgmental environment, and can frame an unconscious message of exclusion, disconnectedness, and disengagement.

The results show most of the nursing students in this study have poor healthy lifestyle behaviour and strong anti-fat attitudes, however, most of them are satisfied with their body image. This is evidence, that serious intervention should be planned by the nursing educators seriously to motivate and enhance nursing students not to become obese and satisfied with their current practice of behaviour as future nurses. Registered nurses must serve as role models for the public to prevent obesity. Today's nursing students will become future registered nurses, and they should become good role models with ideal body weight. Therefore can improve their self-confidence protect their health and provide effective health promotion and education to their patients and community. This could indicate that the nursing curriculum should place a greater emphasis on healthy lifestyle behaviours. Creating a shared educational space that allows nursing students to engage with all perspectives associated with overweight and obesity in a non-judgmental manner, emphasising nurses' personal, professional, and societal responsibilities to live healthy lifestyles, could be a

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

progressive step toward achieving a healthier nursing workforce and patient population in the future.

Conclusions

Malaysia, as it is known, appears to be the fattest country in the ASEAN region. Currently, evidence indicates most Malaysians are lack of physical activity. In general, healthcare workers, particularly nurses, should focus on their role in promoting healthy lifestyles to the public to prevent obesity. These new generations of youth, including nursing students, are tech-savvy and spend a significant amount of time surfing the Internet, networking through smartphones, playing computer games, and tinkering with electronic devices. As young lifestyles become more sedentary, it's critical to implement appropriate interventions to ensure that they learn the value of exercise and a healthy lifestyle. Student nurses should be role models for adopting a healthy lifestyle for younger generations. They can encourage their patients and community members. It is suggested that all healthcare workers take seriously their role model responsibilities to have a good body image with ideal body weight for such health promotion behaviour. The findings from this study can be used as evidence to improve nursing curriculum in nursing education in the future. Another impediment to the World Health Organization's enactment. The current preparedness of future nurses is the organization's vision for the redress of existing barriers among nurses when they are obese and will be at high risk for health complications due to non-communicable diseases that can affect their nursing services to the continued reorientation of the health service. Early concerns about the profession's readiness for its role in health promotion still resound to some extent today. Nursing students, on the other hand, need experience and understanding of their role as health promoters to function in it. The findings support the theory that premature exposure to in-depth consideration of health promotion principles may limit students 'learning (Davies, 2020).

Nurse educators should improve nursing education for better development of future nurses to become good role models to practise healthy lifestyles to prevent obesity. In conclusion, this study showed that nursing students are satisfied with their body image and having poor healthy lifestyle behaviour puts them at high risk of becoming obese in the future. Healthcare workers, especially nurses and nursing students, are encouraged to assess and discuss weight, shape, and ageing-related concerns to prevent obesity. It is important to increase awareness among nursing students should have an ideal body weight and practice healthy lifestyle behaviour to prevent obesity. Appropriate interventions can be developed to guide this nursing student population toward a positive attitude and maintain an ideal body weight with a good body image by practising a healthy lifestyle as a habit. In future research, it might be interesting to measure or explore any associations between students' own BMI and other related factors that contribute to obesity with encourage them to reduce any biases towards obese people to gain a better understanding of their beliefs and practices.

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